# MATE-T580: Quiz 4

Name:

# Question 1

What is the output of the following lines of code:

```
txt <- "a cat and a caterpillar"
gsub("cat", "dog", txt)</pre>
```

# A. "a dog and a dogerpillar" B. "a dog and a caterpillar" C.

D.

TRUE

FALSE

TRUE

# Question 2

What is the output of the following lines of code:

```
txt <- "a cat and a caterpillar"
gsub("\bcat\b", "dog", txt)</pre>
```

```
A.

"a dog and a dogerpillar"

B.

"a dog and a caterpillar"

C.
```

D.

**FALSE** 

### Question 3

What is the output of the following lines of code:

```
txt <- "Institute of Electrical and Electronics Engineers"
gsub("[a-z ]", "", txt)</pre>
```

A.

"I E E E"

В.

"i e e e"

 $\mathbf{C}.$ 

IEEE

D.

ieee

### Question 4

Which is the basic principle behind using xpathSApply to extract textual information from a webpage:

### Α.

The webpage is saved as a .txt file

В.

The webpage is downloaded with the httr package

C.

Text in a webpage is formatted using HTML tags

D.

xpathSApply is smart enough to get you the information you need

# ${\bf Question}~{\bf 5}$

Write a gsub function that uses a regular expression to convert  ${\tt t1}$  to  ${\tt t2}$ :

```
t1 <- "cats, dogs, oxes, and seals"
t2 <- "cat, dog, ox, and seal"</pre>
```

Hint: In regular expressions, the ? mark denotes optional